Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

GEOGRAPHICAL NOTES.

BY

GEO. C. HURLBUT, *Librarian.*

THE GREAT CITIES OF THE WORLD.—The ninth volume of *Die Bevölkerung der Erde*, issued at the end of February as Ergänzungsheft Nr. 107 of *Petermanns Mitteilungen*, is the work of Dr. Alexander Supan, and is wholly dedicated to the statistics of population in places—cities, towns, communes, districts, villages, etc. The details are admirably arranged, and are classified by continents and countries, according to the latest available returns, or estimates.

The results brought together in pp. 125–128 will surprise many readers. These pages contain a list of the 270 cities known to have a population of more than 100,000, and a table of their geographical distribution. The list is headed, of course, by London with 4,415,958 inhabitants. Then follow, in order:

Paris, 2,712,598.
New York–Brooklyn, 2,352,150.
Berlin, 1,763,543.
Canton, 1,600,000.
Vienna, 1,364,548.
Wu-chang–Han-yang–Hankau, 1,200,000.
Tokyo, 1,155,290.
Philadelphia, 1,105,277.
Chicago, 1,099,850.

Siangtan, 1,000,000.

Si-ngan, 1,000,000.

Twenty-three cities number between 500,000 and 1,000,000 inhabitants. Among these are St. Petersburg, 954,400; Tien-tsin, 950,000; Constantinople, 873,565; Bombay, 821,764; Calcutta, 810,686; Rio de Janeiro, 800,000; Moscow, 798,742; Glasgow, 772,040; Hamburg-Altona, 734,625; Manchester-Salford, 703,479; Liverpool, 697,901; Boston, 598,669; Birmingham, 570,460; Buenos Aires, 554,713; and Pekin, 500,000.

The group of cities with a population of less than 500,000 includes: Budapest, 491,938; Osaka, 473,541; Brussels, 471,789; Madrid, 470,283; St. Louis, 466,939; Naples, 463,172; Madras, 452,518; Warsaw, 443,426; Baltimore, 434,439; Lyons, 429,295; Amsterdam, 406,532; Shanghai, 400,000; Melbourne, 385,795; Cairo, 374,838; Cincinnati, 373,566; Copenhagen, 373,123; Leipzig, 357,147; Munich, 350,594; Edinburgh, 333,268; Mexico, 329,535; Dresden, 322,633; Marseilles, 321,499; Dublin, 311,209; Prague, 310,483; San Francisco, 298,997; Milan, 295,543; Rome, 273,268; Antwerp, 268,397; New Orleans, 247,606; Sydney, 246,649; Stockholm, 246,454; Lisbon, 246,343; Washington, 202,978; Havana, 200,448; Frankfurt a/M, 198,436; Genoa, 193,639; Florence, 168,915; Damascus, 168,000; Christiania, 148,319; Nuremberg, 142,590; Venice, 129,445; Athens, 107,251; Valparaiso, 104,952; Lima, 103,556; and Bagdad, 100,000.

Of the twelve cities with more than 1,000,000 inhabitants, 4 are in Europe, 5 in Asia, and 3 in America. Of those with between 100,000 and 1,000,000 Europe has 112, Asia 100, Africa 7, America 37, and Australia 2.

THE EXTREME HEAT AND COLD ENDURED BY MAN.—Under this heading *Science* (January 27, p. 49) has an article by the Marquis de Nadaillac, who writes:

> "But probably the highest amount of cold ever suffered by white man is the one recorded by Mr. Gilder, a reporter of the New York *Herald* attached to the expedition which, under command of Lieutenant Schwatka, went in search of Franklin. In the letters sent home during the winter of 1879–80, so severe in all parts of the world, he speaks of the thermometer lower than -71° C."

This is not quite correct. Lieutenant Schwatka's report of his expedition will be found in the JOURNAL of the American Geographical Society for 1880, Vol. XII., pp. 246–258. On p. 255 is the following statement:

> "The coldest weather encountered was -71° F., January 3d, 1880; the average for that month, which was the coldest, being -53°.2, F."

Mr. Gilder, in his letter to the *Herald*, must have referred to the Fahrenheit thermometer; and the 71 degrees below zero mentioned by Lieutenant Schwatka are equivalent to 57.22 degrees below the zero of the centigrade scale.

In another place M. de Nadaillac speaks of Verkhoyansk, "a small Siberian town at the mouth of the Lena." Verkhoyansk, supposed to be the coldest place in the world, is a small town in Eastern Siberia, but it has nothing to do with the Lena. It is situated, as the name implies, on the upper course of the Yana river. The recorded observations at this place show a mean annual temperature of 2°.74 below zero, and for January, the coldest month, a mean of 63°.58 below zero, Fahrenheit.

M. de Nadaillac is also in error in supposing that Lieutenant Peary made the nearest approach to the North Pole. The highest point reached by Mr. Peary was 82°, but others have gone beyond 83° N. Latitude.

THE FLOATING ISLAND IN THE ATLANTIC.—Dr. Carl Ochsenius sums up, in *Petermanns Mitteilungen, Band 39, II.*, the record of the floating island first seen July 28, 1892, in 39° 30′ N. Latitude, and 65° W. Longitude, not far from the New Jersey coast. It was then a little over 100 feet square, and was covered with a thick growth of vegetation 30 feet in height; and it was visible at a distance of seven nautical miles. It consisted apparently of a portion of woodland, held together so strongly by the roots of the plants that it was able to resist the force of the ocean waves. It was next met with on the 26th of August, in N. Latitude 41° 49′, W. Longitude 57° 39′, and it must have encountered a fierce cyclone on the 13th and 14th of September without breaking up, for it was seen again on the 19th of September in Latitude 45° 29′, Longitude 42° 39′ W. Since then it has not been reported, and the probabilities are that it went to pieces in the October storms. So far as known, it had drifted more than 1000 miles, at the rate of a mile in an hour, but the real length of the voyage must have been much greater. The character of the vegetation, if certainly known, would furnish a hint as to the origin of the island; but, in any case, the incident serves to show that animals and plants may have been transported in some similar way from one land to another, across breadths of ocean hitherto regarded as impassable barriers. At the same time, the chances against the survival of such a raft with its living freight are not to be underestimated. The animals and plants would perish in no long time for want of fresh water; and even if a short voyage brought them to land the breakers would make an end of them.

METEOROLOGICAL OBSERVATORIES IN THE ATLANTIC.—Prince Albert of Monaco advocated, at the session of the *Académie des Sciences*, held on the 18th of July, 1892, the establishment of meteorological observatories on the islands of the Atlantic Ocean.

The Azores, hitherto without telegraphic communication with the continent, will probably be united with the rest of the world by submarine cable during the present year, and it will then be possible, as the Prince says, to know at any moment, by the telegrams sent from Cape Verde, from the West Indies, the Bermudas and the Azores, the progress of atmospheric disturbances arising on the Atlantic.

He observes that the Cape Verde islands occupy a position not far from the region in which originate most of the great cyclones that pass over the West Indies and the United States and then, slanting towards the east, frequently reach the European coasts.

It may be said that the majority of the perturbations, the centre of which has passed near the Bermudas, will be felt more or less strongly in Europe.

The Azores lie almost at the central point of the curves traced by the displacement of the atmospheric disturbances originating on the Atlantic, and by the whirling circulation of the surface ocean currents.

Pico, which rises on the island of the same name to the height of 2222 metres (7290.16 feet), might be utilized for the establishment of a supplementary post for observations on the movements of the upper strata of the atmosphere.

Other observatories might be established at Madeira and the Canaries.

The data collected at these oceanic stations might be centralized at Monaco, and thence communicated to all points.

Prince Albert suggests that the countries most interested in the progress of practical meteorology come to an understanding with regard to the measures for carrying this plan into effect.

COLUMBUS AND THE VARIATION OF THE COMPASS.—Prof. Dr. Hellmann, who represented the Berlin Gesellschaft für Erdkunde at the Italian and Spanish celebrations last autumn, heartily commends all that he saw and heard.

His report appears in the *Verhandlungen, Band XIX., No. 9 u. 10;* and on pp. 484-485 he makes a serious contribution to the history of the discovery.

The Admiral's diary, as it has come down to us, records on the 13th of September, 1492, an observation on the behavior of the compass. It was believed up to that time that the needle invariably pointed to the north; but that day Columbus first noticed its variation, or declination.

It is well known that the genuineness of the diary has been called in question, and with it the right of Columbus to the honor of this important observation.

Dr. Hellmann is able to furnish corroborative evidence in the matter. He says that Mr. Wilde, a German residing in England, has elaborated a new and purely mathematical theory of the earth's magnetism. He has fortified this theory by experiments, and has calculated backwards the direction of the lines of equal declination for the month of September, 1492, with the result that the line of no variation is found at about the point where Columbus passed it and recorded his observation.

CHRISTOPHE COLOMB DEVANT L'HISTOIRE PAR HENRY HARRISSE: 8°. PARIS, 12 OCTOBRE, 1892.—Mr. Harrisse reaffirms in this book, with eloquence and heat, his entire conviction that Columbus discovered America. Most men believed this before Mr. Harrisse began to write, and his conviction, a serious matter to himself, hardly excuses the addition of 120 octavo pages to the mass of unnecessary printed words on the subject of the discovery and the discoverer. Notwithstanding its title, the present work has little to do with history, and not much more with Christopher Columbus. It is, in fact, a tirade, now strong, now feeble, against Pinzon and Magellan, Mr. Justin Winsor and the Madrid Academia de la Historia, the Columbian Exhibition at Chicago, Emilio Castelar, Italy and Mr. John Fiske; and, like most tirades, it says little for its author.

Fernández Duro is attacked with a persistence which seems to tell of a private grief; and on pp. 3 and 4 Mr. Harrisse ridicules a member of the Academia de la Historia, who explained the name Guanahani by the Hebrew words, *Waana-hen-i*, meaning, "Where is the land? There": words exchanged between two Jewish seamen on one of the three vessels in sight of the island. The name of the academician is not given, but the story, which first appeared in Mexico, was set in its true light eighteen months ago by Fernández Duro, who is of the Academy. A short article by him is printed in the *Boletín* of the Madrid Geographical Society, Tomo XXXI., Nos. 4–5–6, pp. 295–299, with the title: "Which of the Bahamas is the island that Columbus named San Salvador?"* and this article ends with a humorous account of a publication just received from Mexico, the work of D. F. Rivas Puigcerver. This publication, entitled, "The Jews in the New World," † told the tale of the Jews on the caravels and the remarks in Hebrew from which the name Guanahani was taken, with the additional information that one of the Jews was Rodrigo de Triana, the sailor who first raised the cry of "Land!" "Señor Rivas Puigcerver," says Fernández Duro, "closes his paper by affirming that on the return to Spain the pension, offered to him who first saw land, was unjustly given to Columbus; and Rodrigo de Triana, the converted Jew whose voice announced the discovery, seeing that his well-earned reward was taken from him, crossed the Strait (of Gibraltar), renouncing his religion and his fatherland. In Barbary he rehearsed to the Hebrews this veracious history, according to which Guanahani, that is, *waana-hen-i*, will forever bear testimony to the influence exercised by the Jews at the ends of the universe." (*Boletín*, Tomo XXXI., Nos. 4-5-6, p. 299).

---

* Cuál es, entre las Lucayas, la isla que denominó Colón de "San Salvador, por D. Cesáreo Fernández Duro.

† Titúlase *Los Judíos en el Nuevo Mundo.* México. Impr. del Sagrado Corazón de Jesús, 1891, en 8°, dos hojas.

The sense of humour is not to be acquired and the lack of it may be forgiven; but Mr. Harrisse is endowed with a lively fancy, not always under control.

ALBO DI ONORANZE INTERNAZIONALI A CRISTOFORO COLOMBO. INIZIATO DA ANGELO DE GUBERNATIS E CECILIO VALLARDI. OFFERTO IN DONO ALLA CITTA DI MILANO PEL FAUSTO RICORDO DEL QUARTO CENTENARIO DELLA SCOPERTA DELL' AMERICA. 8°. MILANO-ROMA. 1892.—This album, designed by Prof. Angelo de Gubernatis, is one among the many curious memorial publications of the Columbian year. It contains letters, sketches, musical compositions, poems, etc., reproduced in fac-simile, from contributors in various countries. Seven hundred and eight persons express themselves in this collection concerning the merits of Columbus. The ambassadors and ministers come first; then the Italian orientalists, writing in Arabic, Coptic, Chinese, Sanskrit, etc.; then the Italians who prefer their own tongue, and after them the men of other countries, European, African, American and Asiatic. Most of these compositions have the merit of brevity, and not a few are original in several ways. A Styrian professor writes that North America rivals Europe in classical writers, like *W. Jrwing Prescott Wallace*, and that *Taylor* opened China and Japan to the commerce of the world in 1843. Mahamahopadhyaya Kavirag'a Syamaladasa declares, in the English translation of his Sanskrit verses, that Columbus, "Hoping to reach India by way of Ocean, set out aigain, and he, the clever-fellow, discovered the land of South-America, heretofore unknown." Ernest Renan quotes Horace:

> Illi robur et aes triplex
> Circa pectus erat . . . .

The spirit of Jules Simon's letter is in this extract: "Christopher Columbus is the greatest of all. He gave to the world a new world; and this new world is refashioning the world." The quotation from the *Medea* of Seneca appears again and again, in Latin and in translation. Tennyson heads the list of the English writers, with the lines from his poem entitled "Columbus." Mr. Gladstone writes that he has been obliged, for reasons given, to decline taking part in memorials of the dead, and asks to be excused in the case of Columbus. Mr. Froude thinks that the monument in the cathedral at Havana ought to be made more worthy of the great name which is inscribed upon it. Herbert Spencer's letter is in these words: "Be their rank or position what it may, from emperors and kings downwards, those who have done nothing for their fellow-men I decline to honour. I honour those only who have benefited mankind, and, as one of them, I honour Columbus." Mr. Huxley sends a quotation from Ferdinand's life of his father. The Polish contributors are in great force. Carmen Sylva writes a German poem on Columbus in chains, and a painting, which is not reproduced. The University of Salamanca protests against the misrepresentation of its attitude towards Columbus, declaring that it was not consulted by the Catholic Sovereigns, nor did it take part as a body in the supposed public conferences at San

Estéban, in November, 1486. The Hungarians close the European list. Egypt is the only African country represented. The Argentine Republic, Brazil, Mexico and, in the United States, Cornell University do duty for America.

THE LOUBAT PRIZES AT COLUMBIA COLLEGE.—Attention is invited to the following notices:

COLUMBIA COLLEGE IN THE CITY OF NEW YORK.

Mr. Joseph F. Loubat has established, at Columbia College, two prizes, a first prize of $1000 and a second of $400, for the best works published in the English language upon the history, geography, archæology, ethnology, philology, or numismatics of North America. The competition for these prizes is open, under the deed of gift, to all persons, whether connected with Columbia College or not, and whether citizens of the United States or of any other country. The first award will be made at the close of the present year for the best works published since January 1, 1888. No works will be considered save such as rest upon original research and constitute a distinct contribution to science. In order to ensure consideration of their works, authors are invited to send copies to the President of Columbia College, not later than June 1, 1893; but the competition will not be restricted to works thus submitted. Copies of the regulations adopted by the Trustees can be obtained from the President's Secretary.

Mr. Loubat has provided a permanent endowment for these prizes, which will make it possible to award them at least every five years. Beginning with the competition of 1898, it has been decided to divide the above list of subjects into two groups, in which the award will be made alternately. These groups will consist, respectively, of history, geography, and numismatics; and of archæology, ethnology, and philology. It has also been decided that, after the present year, Mr. Loubat's foundation shall be employed to stimulate research and not simply to reward the authors of meritorious works published without reference to these prizes. Early in 1894 the group of subjects selected for the competition of 1898 will be made known, and a number of topics will be announced to which the competition will be primarily restricted. That is, the College will call for the investigation of certain questions and the publication of the results, and the best works produced in answer to this call, if of sufficient value, will receive the prizes. But if no works upon the topics suggested seem worthy of an award, the prizes will be adjudged to the best works falling within the general group of subjects designated for the period.

It is hoped that Mr. Loubat's generous foundation will serve to encourage American research in a field that is peculiarly our own, but in which much of the best work has hitherto been done by strangers.

SETH LOW, LL.D.,
President.

LOUBAT PRIZE.

Regulations for 1893.

I. Two prizes, a first of $1000, and a second of $400, the gift of Mr. Joseph F. Loubat, shall be awarded in December, 1893, to the authors of the best works published in the English language upon the history, geography, archæology, ethnology, philology, or numismatics of North America. The competition for these prizes shall be open to all persons, whether connected with Columbia College or not, and whether citizens of the United States or of any other country.

II. The conditions of competition are:

(*a*) That the work fall within the above list of subjects.

(*b*) That it be written by one person.

(*c*) That it embody the results of original research and constitute a distinct contribution to science.

(*d*) That it shall have been published not earlier than 1888, and not later than April 30, 1893. But works consisting, or to consist, of a series of volumes, shall be admitted to competition if any volume shall have been published within the period named.

III. To insure consideration of their works, authors are invited to send three copies of each work to the President of Columbia College, not later than June 1, 1893; but the award shall not be limited to works so submitted. Copies of works submitted shall be placed, after the award, in the Library of Columbia College.

IV. Neither of the prizes shall be divided.

V. The recipient of a prize shall present five copies of his work to Columbia College, which copies shall be distributed in accordance with the conditions prescribed in Mr. Loubat's deed of gift. Every subsequent edition of a prize work shall contain, upon the title-page, the words,

"Loubat Prize,
Columbia College in the City of New York. 1893."

VI. The Committee of Award, to consist of three members, shall be appointed, not later than February 1, 1893, by a committee composed of the President of Columbia College and the Deans of the Faculties of Political Science and Philosophy.

LOUBAT PRIZE.

General Regulations.

I. Two prizes, viz , a first prize of not less than $1000, and a second prize of not less than $400, to be known as the Loubat Prizes, shall be awarded in the year 1898, and in every fifth year thereafter, to the authors of the best works on the history, geography, archæology, ethnology, philology, or numismatics of North America. The competition for these prizes shall be open to all persons, whether connected with Columbia College or not, and whether citizens of the United States or of any other country.

II. For the purpose of the award the subjects above named shall be divided into two groups, in which the award shall be made alternately, viz.:

(*a*) History, geography, and numismatics.

(*b*) Archæology, ethnology, and philology.

III. The conditions of competition shall be:

(*a*) That the work fall within the group of subjects designated for the current quinquennial period.

(*b*) That it be written by one person.

(*c*) That it embody the results of original research.

(*d*) That it be published in the English language.

IV. Neither of the prizes shall be divided.

V. A Committee of Award, consisting of three members, shall be appointed, not later than January, 1894, and at the beginning of each succeeding quinquennial period. It shall be appointed, and any vacancy occurring therein shall be filled, by a Committee composed of the President of Columbia College, and the Deans of the Faculties of Political Science and Philosophy. The Committee of Award shall determine and announce, within two months after its appointment, what further conditions, not inconsistent with the purpose of the endowment, shall be established for the current quinquennial period. In particular, this Committee may recommend one or more special topics of investigation, and limit the awards, primarily, to works upon such topic or topics. It shall also determine and announce whether works shall be submitted in competition, and if so, in what manner and at what date.

VI. The Committee shall report to the President of Columbia College not later than May 1st, of the year designated for the award. If special topics of investigation shall have been recommended and no work upon these topics shall appear worthy of a prize, the Committee shall have power to confer the prizes upon the authors of the most meritorious works falling within the provisions above laid down in Paragraph III., and published within the preceding ten years. If but a single work upon a suggested topic shall appear worthy of a prize, the Committee shall have power to award the second prize on the broader basis of competition above indicated. If no works, or but a single work, be found worthy of an award, both or either of the prizes may be withheld.

VII. All works submitted in competition shall be placed, after the award, in the Library of Columbia College. The recipient of a prize shall present five copies of the prize work to Columbia College, which copies shall be distributed in accordance with the conditions prescribed in Mr. Loubat's deed of gift; and all subsequent editions of the work shall bear upon the title-page the words:

"Loubat Prize,
Columbia College in the City of New York,"

with the date at which the prize was conferred.

SETH LOW, LL.D.,
President.

MAPS OF MARYLAND.—Johns Hopkins University Circular, Vol. XII., No. 103 (February, 1893), is principally devoted to a paper by Prof. George H. Williams on the maps of the State of Maryland. These are arranged in six categories:

1. Maps of early explorers and settlers.
2. Surveys of boundaries.
3. Topographical and geological surveys authorized by the State.
4. Charts published by the U. S. Coast Survey.
5. Private surveys (railroads, canals, counties, etc.).
6. Recent work published or in preparation by the U. S. Geological Survey, the Johns Hopkins University, and the Maryland World's Fair Commission (1884–1893).

The most important of the early maps is the one made by Augustine Herman, engraved by Faithorne, and published in 4 folio sheets, in London, in 1670. The scale is 12 miles to an inch.

In 1834, the General Assembly passed an act arranging "to make a perfect and complete map of the State according to the plan and drawing. Prof. J. H. Alexander; appointed engineer under the act, prepared a topographical map which was never published in full size, but still exists in two manuscript copies. It measures 6 feet 7 inches by 3 feet 5 inches, on a scale of 1:200,000, with 50 feet contour lines east, and 100 feet contour lines west of the Monocacy river. Prof. Williams assigns to it the date of 1836. It was traced for the use of the Government, in 1861, by order of Gen. Scott.

The work of the U. S. Coast and Geodetic Survey in Maryland is fully described in a statement prepared by Assistant J. W. Donn, under the direction of Superintendent Mendenhall.

The Private Surveys include State, County and City Maps, Railroad and Water Supply Maps. The oldest of these are an Exact Plat of Baltimore town, of 1756, and a plan of Baltimore, of 1780, both in manuscript.

The recent topographic work has been done by the U. S. Geological Survey. All the area of the State has been surveyed, with the exception of the Eastern Shore (the part lying east of Chesapeake Bay), and a strip 13′ 28″ wide lying between the parallels of 39° 30′ and Mason and Dixon's line (39° 43′ 28″), and extending from Emmittsburg to the Delaware boundary. West of the meridian of 77° 30′, the mapping is on a scale of 2 miles to an inch (1:125,000), with 100 feet contours. East of 77° 30′ the same scale is applied in the three atlas sheets published, but with 50 feet contours; and the 1 mile scale (1:62,500), with 20 feet contours, has also been employed for all the territory thus far surveyed to the east of the meridian of 77° 30′.

Baltimore has received a great deal of attention. Prof. Williams notes three topographical maps of the city and its vicinity: the Baltimore Sheet of the U. S. Geological Survey on a scale of 1:62,500, with the city at the centre; the Baltimore Atlas Sheet of the U. S. Geological Survey, on the same scale, and with the city near the southern edge; and the Johns Hopkins University Topographic Map of Baltimore and Vicinity, on a scale of 1:62,500, and embracing over 400 square miles. This last map has also been issued, geologically colored. A new geological map of the entire State, on a scale of 8 miles to an inch (about 1:500,000) is in course of preparation for the World's Fair book on the resources of Maryland.

A relief model of Baltimore and its neighborhood, on a scale of four inches to the mile and with no vertical exaggeration, is now in Johns Hopkins University; and a relief model of the entire State, to measure 7 by 12 feet, has been ordered by the Maryland Board of Managers for the World's Fair, and is now in course of construction.

THE MAPPING OF MISSOURI.—Under this title Mr. Arthur Winslow, with the assistance of Mr. C. F. Marbut, reviews, in the *Transactions* of the Academy of Science of St. Louis, Vol. VI., No. 3, the cartographical record of Missouri, from the Ptolemaeus Map of 1508 to the surveys now in progress. It is true that Missouri does not appear on the Ptolemy map, but Mr. Winslow, like the Nuremberg Chronicler, begins his work at the beginning, and wanders by the way. He makes Columbus enter the Gulf of Mexico and explore its southern coast.

The State of Missouri was admitted to the Union in 1820, but the boundaries, as now established, were not definitely settled till after 1850.

The period of explorations in the Missouri Territory may be said to open with the Lewis and Clarke expedition of 1804–1806, and to close with the Warren map (Vol. XI., Pacific Railway Surveys) published in 1858. Of this map, compiled by Lieut. G. K. Warren, Mr. Winslow says that it was much in advance of anything so far published, both as to accuracy of location and amount of detail included; and that, for the scale used, a much better outline map of the State could hardly be prepared from our best maps of to-day.

The U. S. Coast and Geodetic Survey began its work in the State in 1871 with the measurement of a base line in the Missouri bottoms, and by 1886 the chain of triangles had been carried across into Kansas; and in 1891 precise-levelling was completed, from St. Louis on the east to Kansas City on the west.

The Mississippi River Commission, organized in 1879, completed the survey of the river to the northern boundary of Missouri in 1891. The maps published by the Commission are on two scales; one series, of about 31 inches to the mile, showing the shore line, the positions of bars and the depth of water, with the topography on each side of the alluvial plain in five-foot contours, and distinguishing timbered and open country; the other, of a mile to an inch, being practically a reduction of the first series.

The Missouri River Commission, which began operations in 1878, has published one series of maps, on a scale of a mile to an inch, giving "an accurate delineation of the shore line, islands and sand-bars, the general topographical features of the valley and the line of bluff bordering the same, the whole checked by a system of triangulation carried along the river banks."

About one-third of the area of Missouri has been mapped by the U. S. Geological Survey. The work, begun in 1884, was continued without interruption up to July, 1889, when it ceased, and has not been resumed. The product is: 25 sheets for Missouri and 5 for portions of Missouri and Kansas, all on a scale of 1:125,000, or about 2 miles to an inch, with contour interval of 50 feet; and 2 sheets, including St. Louis and parts of St. Louis County and Illinois, on a scale of 1:62,500 (a mile to an inch) with contour interval of 20 feet.

Mr. Winslow objects to these sheets that the scale is too small and the contour interval too great to bring out the characteristics of the topography; and, furthermore, that the method employed furnished a weak vertical control, so that the altitudes represented are very inaccurate in places.

Maps of some thirty counties of the State, prepared by the first and second geological surveys of Missouri, are extant. The geography and topography of these maps represent, it is said, very little original work; but with them must be mentioned a topographic map of Pilot Knob and vicinity on a scale of 1200 feet to the inch, and a contoured map of the Granby mining district on a scale of 300 feet to the inch.

The third geological survey, now in progress under Mr. Arthur Winslow, has undertaken the preparation of detailed maps of different portions of the State. The scale adopted is 1:62,500, and the area represented by each sheet is a quadrilateral of 15″ (*sic*) extent in latitude and longitude; which may be, within the State, anywhere between 228 and 240 square miles.

There have been surveyed and plotted ten sheets; and three or four more will be added during the present season.

Mr. Winslow thinks that the methods by which these maps are constructed are most satisfactory for accomplishing all the ends in view. His paper is illustrated by diagrams and by a copy of the Higginsville sheet of the geologic and topographic map; but the proof-reading has been carelessly done. Such misprints as *Nur-*

emburg, Orteleus, Jamacia, Mercator (*Girard*), *Frontinac, the peninsular, Sinex* and *Freemont*, are not to be excused.

THE MISSISSIPPI RIVER AND ITS SOURCE.*—Mr. J. V. Brower, the author of this volume, says in his prefatory note:

> "To follow the channel of the Mississippi river to its utmost source in search of geographical facts, it became advisable to know of the historical record concerning discoveries from the mouth of the river to its source.
>
> "The examination of these records, co-extensive with the history of the discovery of the coast line of North America, imposed a duty requiring great care and labor. Examinations in the field at the source of the river have been accomplished with the same great care and labor that has been exercised in the field of historical research. . . . The formal dedication of the Itasca Basin to be perpetually used as a public state park, its legal status having been amply recognized in a grant of lands by the Congress, is one of the benefits of this examination." . . .

Mr. Brower, in his account of the Spanish discoveries, is led to the conclusion that the Bay of Espiritu Santo of the Chaves maps was the present Galveston Bay, and that either the Canaveral river or the Rio de Flores of the maps generally was intended for the Mississippi itself.

About fifty-five pages are devoted to the French accounts; the early territorial claims are then examined; and on p. 119, Mr. Brower reaches Elk Lake, concerning which so much has been written, and William Morrison, who seems to have visited in 1803 the basin surrounding the source of the Mississippi. The expeditions are then taken up in their order from that of

---

* The Mississippi River and its Source. A Narrative and Critical History of the Discovery of the River and its Headwaters, accompanied by the Results of Detailed Hydrographic and Topographic Surveys. By Hon. J. V. Brower, Commissioner of the Itasca State Park, representing also the State Historical Society. With an Appendix by Alfred J. Hill, Esq. Illustrated. 8°. Minneapolis, Minn. 1893.

Pike in 1805–6 to the detailed survey by Mr. Brower as commissioner of the Itasca State Park, in the four years 1888–1892.

Mr. Brower finds that the Itasca basin is the most remote water-shed on the main river from its mouth at the Gulf of Mexico, and Itasca Lake the central reservoir at the lowest depression. The principal, longest and largest stream within the basin is the one discovered by Jean N. Nicollet in 1836, and this stream is found to be the Mississippi River; and the "true and actual source of the Mississippi is THE GREATER ULTIMATE RESERVOIR," under the Heights of Land. This Greater Ultimate Reservoir, though a positive discovery in grammar, is identical with the sources described by Nicollet in these words:

> "The Mississippi holds its own from its very origin; for it is not necessary to suppose, as has been done, that lake Itasca may be supplied with invisible sources, to justify the character of a remarkable stream, which it assumes at its issue from this lake. There are five creeks that fall into it, formed by innumerable streamlets oozing from the clay-beds at the bases of the hills, that consist of an accumulation of sand, gravel and clay, intermixed with erratic fragments; being a more prominent portion of the great erratic deposite previous described, and which here is known by the name of *Hauteurs des Terres*—heights of land.
>
> "These elevations are commonly flat at top, varying in height from 85 to 100 feet above the level of the surrounding waters. They are covered with thick forests, in which the coniferous plants predominate. South of Itasca lake, they form a semicircular region, with a boggy bottom, extending to the southwest a distance of several miles; thence these *Hauteurs des Terres* ascend to the northwest and north; and then, stretching to the northeast and east, through the zone between 47° and 48° of latitude, make the dividing ridge between the waters that empty into Hudson bay and those which discharge themselves into the gulf of Mexico.
>
> "The principal group of these *Hauteurs des Terres* is subdivided into several ramifications, varying in extent, elevation, and course, so as to determine the hydrographical basins of all the innumerable lakes and rivers that so peculiarly characterize this region of country.
>
> "One of these ramifications extends in a southerly direction, under the name of *Coteau du Grand Bois;* and it is this which separates the Mississippi streams from those of the Red river of the North.

"The waters supplied by the north bank of these heights of land—still on the south side of lake Itasca—give origin to the five creeks of which I have spoken above. These are the waters which I consider to be the utmost sources of the Mississippi.

"Those that flow from the southern side of the same heights, and empty themselves into Elbow lake, are the utmost sources of the Red river of the North; so that the most remote feeders of Hudson bay and the gulf of Mexico are closely approximated to each other."—(Report intended to illustrate a map of the Hydrographical Basin of the Upper Mississippi River, made by I. N. Nicollet,* while in employ under the Bureau of the Corps of Topographical Engineers, pp. 57, 58. Doc. No. 52. 28th Congress, 2d Session. Ho. of Reps. Washington, 1845.)

In terminating his report, Mr. Brower duly acknowledges that his explorations come after the labors of those who preceded him in 1803, 1832, 1836 and 1886, and claims only such measure of credit as a more extended survey and discovery may entitle him to receive. His acknowledgment does not contradict the order of events, and he deserves credit for the energy and industry which he has displayed in accumulating the data set forth in his 300 pages. An appendix by Mr. Alfred J. Hill tells how the Mississippi River and the Lake of the Woods became instrumental in the establishment of the northwestern boundary of the United States; and the whole work, which appears as Vol. VII. of the Minnesota Historical Collections, forms a handsome volume, abundantly illustrated with portraits, maps and views.

THE GEOGRAPHICAL SOCIETY OF THE PACIFIC.—In the *Transactions and Proceedings* of this San Francisco Society, Vol. III., 1892, Lieutenant J. P. Finley, U. S. A., has a paper on the weather, and the value of weather maps; Prof. George Davidson describes the discovery of San Diego Bay, and the eruption of the

---

* So printed on title-page.

Volcano Weniaminof in August, 1892; Prof. E. E. Barnard tells of the progress in the application of photography to astronomy; and Lieut.-Commander Z. L. Tanner, U. S. N., contributes an account of the recently completed survey for a submarine telegraph cable between the California coast and the Hawaiian Islands.

Prof. Davidson says that very little has been published on the geography of the peninsula in the neighborhood of the Volcano Weniaminof, the position of which is fixed by Tebenkof, in his second chart, in N. Lat. 56° 05′, W. Long. 159°.

The eruption of August, 1892, was reported by several observers. One of these, Capt. Applegate, of the schooner *Everett Hays*, was at Ivanof Harbor, 25 miles in a southwesterly direction from the volcano, on the 27th of August. He makes the following statement:

> "About 10 o'clock Saturday night, the weather being calm and clear, a low, rumbling, intermittent sound was heard, and caused the crew to come on deck to ascertain the cause. There was no surf, and the cause was unknown. Between 11 and 12 o'clock, a dark cloud was observed in the sky, towards the northeast and about 2 o'clock A.M., this cloud had increased in volume and height until it covered the greater part of the northeast heavens. The low, rumbling noise had become a continuous roar, like the blast from a great furnace, and by 3 o'clock lurid flames could be seen amidst the smoke, which was now rising high in tremendous volumes from a single point, being by compass about northeast. The vast column of smoke reached an estimated height of two miles, and then expanded like a great spreading oak. From the lower edge of this great volume, colored flames waved like banners, and vivid flashes of lightning were apparently discharged into the base of the column. This grand display continued, until daylight caused the flames to be somewhat dimmed, but masses of dense smoke continued to roll upward all Sunday. Toward noon a light northwest wind sprang up, and the clouds began to trend to the southeastward, covering the mainland and the adjacent islands with a thick layer of ashes and volcanic dust.
>
> "At the anchorage it was dead calm, and there was no perceptible movement of the sea on the beach, as would have occurred had there been earthquake waves. The continuous lightning discharges were accompanied by deafening peals of thunder, that were plainly heard at the Metrufan village, 50 miles distant, and at Unga Island, 75 nautical miles distant."

The *Everett Hays* left Ivanof Bay on Sunday and steered south to Pavlof Island. The ash cloud was plainly visible to the eastward until late on Monday.

Capt. Erskine, commanding the steamer *St. Paul*, when in latitude 53° 05′, longitude 155° 52′ W., on Sunday, August 28, passed into a black cloud of volcanic ash, which nearly obscured the sun from 10 o'clock, A.M., to 2 P.M.; the sea was grey with the ashes and the decks were covered with them. They had a strong sulphurous odor.

The cloud was estimated at about 100 miles in length and from a half mile to a mile in height.

A bottle of the dark grey dust, gathered from the deck of the *St. Paul*, was submitted to Mr. H. G. Hanks, of the San Francisco Microscopical Society, and examined by him. The dust was found to be dark brown in color, slightly magnetic, fusing easily before the blowpipe to a glossy black globule, which was magnetic. It gave a strong iron reaction and, when heated in a glass tube, water and a faint white sublimate. Under the microscope, the particles ranged in size between 0.005 and 0.00025 inch. Most of them resembled nearly transparent quartz, others were like hornblende. A qualitative analysis showed silica, oxide of iron, lime, alumina and water.

Lieut.-Commander Tanner sketches the rise and progress of submarine telegraphy, and then describes the surveys for a cable to the Hawaiian Islands. The lengths of the routes are as follows: the *Tuscarora's* line from San Francisco to Mauna Loa Bay, near the east end of Oahu Island, is 2093 nautical miles; the *Albatross* great circle line from Salinas Landing, Monterey Bay, to Mauna Loa Bay, is 2091 miles; the *Albatross* rhumb line, to and from the same points, is 2107 miles. Seven miles must be added to these lengths, if the terminus be made at Waikiki. The *Thetis* line from Point Conception to Hilo is 2050 miles in length.

The surveys have established the existence of a great central plateau between the coast of California and the Islands, and a general, though moderate, rise of the ocean bed in the central regions. Lieut.-Commander Tanner considers that the surveyor's task is accomplished.

RAINIER, OR TACOMA.—The Tacoma Academy of Science held a meeting on the 6th of February last to discuss the question, whether Tacoma or Rainier is the right name of the great Washington mountain. Indians of three tribes were present and gave their testimony in favor of Tacoma, which was shown to be a modification of the original form, Tacobet.

Judge Wickersham read a paper on the subject, and reached the following conclusions:

1. The Puget Sound Indian name for the mountain is "Ta-co-bet"; the b in Indian is interchangeable with m, and hence we also find the word used as "Ta-co-man," and "Ta-co-ban."
2. The Yakima-Klickitat name is "Ta-cho-ma," with the "ch" as in German, but most frequently written as "Ta-ho-ma."
3. The name means "snow-covered mountain."
4. The word "Tacoma" is a fair, honest, Indian noun.
5. The word "Tacoma" should be preserved as the name of this royal mountain peak, and "Mount Rainier" should be abandoned.

It may be admitted that Tacoma is an honest, Indian noun, whatever that may be, and also that it is a pretty word; but these admissions leave the facts as they were.

Vancouver named Mount Rainier, by an undoubted right, in 1792, the very year in which Captain Gray, by the same right, gave the name of Columbia to the Oregon river; and the two names so bestowed will stand. The purely sentimental objection to Rainier is one hundred years behind time, and Judge Wickersham does himself and the Academy of Science no credit by adopting a disrespectful tone towards Vancouver.

THE DWARFS OF THE ATLAS.—Mr. R. G. Haliburton, at the Congress of Orientalists in London, called attention to the existence of a race of dwarfs in the Atlas range. Some additional information on the subject is furnished by Mr. Walter B. Harris in a letter written from Tangier, on the 31st of December last, to the London *Times.*

Mr. Harris, accompanied by Mr. Cunninghame-Graham, made a journey in Southern Morocco last November. At Amzmiz, not many miles to the south-west of Morocco, it was learned that a number of the so-called dwarfs were under the jurisdiction of the Governor of the place, and that one of his soldiers belonged to the race. Mr. Harris saw the man, who came from a peak above Imintella, a place mentioned by Mr. Haliburton. The soldier is described as slightly over 4 feet in height, of reddish brown color and, except for a few hairs on the chin, smooth-faced. Imintella was visited, but no dwarfs were found there. Farther on, however, the travellers met a caravan of donkeys, driven by seven men, none certainly above 4 feet 6 inches in height. They were of various ages. One wore a thick grey beard and another a small black beard. They did not understand Arabic, and Mr. Harris's guide could make nothing of their speech. "In all," says Mr. Harris, "we saw, perhaps, thirteen or fourteen of these dwarfs, nor did we meet with one single negative to the question I repeatedly asked as to their existence."

They are strict Mohammedans; and they are said by the Moors to be a wild people, who live in the upper ranges of the mountains in built houses, and are given to shooting any who penetrate into their domains. Mr. Harris explains their existence as follows:

> "I think that it is now conclusively proved that the small people of Mount Atlas are not 'pygmies'—that they are, in fact, merely a certain collection of Shleh tribes, who, through the high altitudes at which they live, and the extremes of climate they are subject to, from their poverty and inability to grow crops, from the scarcity and bad quality of such food as they are able to collect, have, in the lapse of centuries, become of almost extraordinarily stunted growth. Why, then, have they not been seen by former travellers? The answer is simple. Both Sir Joseph Hooker and Mr. Joseph Thomson, almost the only Europeans who have ever visited the Atlas, were during their travels entirely in lands governed by Kaids representing the Sultan, and the very proximity of these Kaids would drive the 'small people' to a distance, who would never on any account visit their castles. It is for this reason alone that the existence of a stunted race of Shleh people must have failed to have attracted their notice."

On his return to Mogador Mr. Harris visited the caves of Ain Tarsilt, excavated by troglodytes, who must have been men of a low stature, the roofs of the caves being only 5 feet above the floors, and the alcoves which served for beds being less than 5 feet in length.

No effort is made to establish a connection between the former cave dwellers and the diminutive men of the Atlas mountains, whose physical condition is sufficiently accounted for by climatic influences.

The Algiers *Atlas*, of February 9, quotes from *The Times of Morocco* a notice of these mountaineers communicated by an Englishman just returned from the foot of the Greater Atlas. This Englishman was within two hours' journey of the "shrine of Mulaï Ibraheem," and there learned that the shrine was visited by a number of small men and women from the south side of the mountains. To the question, why were these little people never seen in the plains? the answer was made that any of them found beyond their borders were seized and fined. The Englishman's Moorish servant and a servant of the Kaïd volunteered to go and spy out the land. They left early in the morning of one day and returned at noon of the next, bringing some of the sacred dust from Mulaï Ibraheem's tomb as irrefragable evidence; and told this story: They reached the tomb, and saw a man of ordinary stature carrying upon his back about two and a half hundred weights of flour to the top of the mountain, and descending again without any apparent effort. They had also seen there little men dressed in ordinary mountaineer garb, with women small and pretty, handsomely dressed, and decked out with jewellery and ornaments. These men and women they afterwards saw bathing in the sacred stream. One of the little men was measured with a string, and a knot was tied in it to show his height—4 feet 6 inches.

As the composition of three presumably healthy men, this may be called a poor story, and there is room for better things.

THE SOURCE OF THE NILE.—Dr. Oscar Baumann has traced the Nile to its source beyond the Victoria Nyanza, in the Kagera river, which rises in 4° S. Lat. among the mountains on the eastern shore of Lake Tanganika. This discovery seems to establish the supremacy of the Nile as the longest river on the globe, the rank assigned to it in G. A. von Klöden's table, published in 1885. The length of the Nile is there estimated at 6470.2 kilometres (4020 miles), and that of the Mississippi-Missouri at 5882.1 kilometres (3655 miles).

Dr. Baumann's letter describing his journey appears in *Petermanns Mitteilungen*, 39 Band, II., p. 47, with a map of his route.

He started on the 8th of August, 1892, from Mwanza at the southern end of the Victoria Lake and kept a westerly direction through a mountainous, well-watered country. On the 5th of September he reached the Kagera (there called the Ruvuvu) and Urundi, the inhabitants of which, taking him for the descendant of their early kings of the Mwesi (the moon), greeted him with loud rejoicings and came in crowds to see him. Thence through grassy mountain land, with frequent outcroppings of granite, he kept on to the Akanyaru, which proved to be not a lake, but a river. The Wurundi give the name of *Nyanza* to any large body of water, and designate a lake, such as the Victoria, the Albert Edward, or even the Urigi, by the name of *Tanganyika*, which explains some of the errors with regard to the existence of lakes. September 11, Dr. Baumann crossed the Akanyaru into Ruanda, but could learn nothing concerning a great lake in that country. The people declared that the Akanyaru was their largest river.

Turning to the southwest he again crossed the Akanyaru, a day's journey from its source, and entered

Urundi a second time. Here he had to sustain a bloody encounter with the Watusi. On the 19th of September he came to the source of the Kagera in the lofty, wooded crest of the mountains that form the water-shed above the Rusizi valley. The Warundi bury their kings in this place and call the mountains Misosi a Mwesi (Mountains of the Moon), and the whole Urundi country is called the Land of the Mwesi, or Moonland.

The broad valley of the Rusizi, shut in by high mountains (6600 feet), extends from Tanganika to the northward. Dr. Baumann was told that the Rusizi river had its source in a body of water (perhaps a lake) named Kiva, to the south-westward of the Mfumbiro mountains. This Kiva, he thinks, may be the Oso Lake of the maps. September 25 he reached the Tanganika at Usige, where the oil-palm grew luxuriantly and there were many green parrots. The lake was very low. He climbed the water-shed once more and marched to the south-eastward. On the way he had some sharp fighting with the Watusi (Wahima), and captured 200 head of cattle. The mountainous country was watered by the southern affluents of the Kagera, and of these the Luvirosa, which is the most easterly, rises in 4° South Latitude.

It was found that the water-shed of the Mlagarasi formed also a dividing line between climates; to the westward the rain fell every day, while the land to the eastward was parched. The Mlagarasi was crossed for the second time, October 16, and the journey ended at Tabora, where the letter was written on the 8th of November.

Not the least interesting result of this expedition is the restoration of the Mountains of the Moon to the domain of geography.

THE SOURCE OF THE CONGO.—The following telegrams, dated February 6, at Kinshasa (Stanley Pool), were received at Brussels, March 4:

(1) "We arrived at Luzambo on the 7th of January, and at Kinshasa, February 5. We shall return to Europe by the Portuguese steamer probably in March.

"The Lukuga is the true stream of the Lualaba, and the problem of its navigation is solved; the whole country has been well studied. All the powerful Chiefs have peacefully submitted to the authority of the State, which is everywhere recognized.

"An Arab revolt has broken out at Kasongo. The resident, Lieut. Lippens, and his associate, Lieut. Debruyn, have been killed.

"Sefu, the son of Tipu-Tip, was beaten by Lieut. Dhanis in November, and driven beyond the Lomami.

"We left Katanga pacified and tranquil.

"The members of the expedition are in good health.

"DELCOMMUNE."

(2) "We arrived at Luzambo on the 11th of January, after having lost four hundred men by the famine.

"Captain Bia died at Katanga of sickness. We shall reach Brussels in April. We have marched 6,000 kilometres (3,728 miles) through the concessions of the Katanga Company.

"We have seen and have studied the whole country, and have peacefully obtained the submission of the territories comprised between Lake Moero, the Luapula, Lake Bangweolo, the southern frontier and the 24th degree of East Longitude.

"At Shitambo we set up the commemorative tablet to Livingstone, entrusted to Mr. Arnot by the Geographical Society of London.

"I take with me, as far as Boma, the nephew of King Kilima, the greatest Chief of the Bahusi.

"The four surviving members of the expedition are in good health.

"FRANQUI."

Commander Cameron, R. N., in his journey across Africa, heard of the Lukuga as the outlet of Lake Tanganika, and determined to find it. This was in 1874.

"On the 3d of May," he says, "there was a slashing breeze freshening up from the eastward, and I made sail with many a hope that I might, in a few hours, find myself in the outflowing Lukuga. Shortly before noon I arrived at its entrance, more than a mile across, but closed by a grass-grown sandbank, with the exception of a channel three or four hundred yards wide. Across this there is a sill where the surf breaks heavily at times, although there is more than a fathom of water at its most shallow part.

"The Chief visited me, and informed me that the river was well known to his people, who often travelled for more than a month along its banks, until it fell into a larger river, the Lualaba, and that in its course it received the Lulumbiji and many small streams. No Arab, the Chief said, had been down the river, and traders did not visit this place, all beads and cloth required being obtained by sending to Ujiji.

"It rained very hard in the morning; but, in company with the Chief, I went four or five miles down the river until navigation was rendered impossible, owing to the masses of floating vegetation. It might be possible, however, to cut passages for canoes. Here the depth was three fathoms; breadth, six hundred yards; current, one knot and a half, and sufficiently strong to drive us well into the edge of the vegetation."—(*Across Africa, New York ed., pp.* 214–215).

Cameron was told that, four or five miles below, the river would be found clear for about the same distance, and then again obstructed; and so on, for a long way. Driftwood from the lake passed the inlet in which his boat lay, and worked into the grass. He was not able to secure an interpreter or a guide for the voyage down the river, and the cost of an expedition was unfortunately beyond his means; for the enterprise tempted him, and he turned away with reluctance. Stanley, two years later, examined the lake and the region, and came to the conclusion that the Lukuga, formerly an affluent of the Tanganika, was about to become its outlet and to find its way to the Congo.—(*Through the Dark Continent, N. Y. ed. Vol. 2, pp. 50–52.*)

Delcommune has had the good fortune to discover that the Lukuga issues from the great lake, passes through Lake Lanji and flows from the north as the Congo.

TITLES OF PAPERS IN GEOGRAPHICAL JOURNALS.

BERLIN. — *Verhandlungen der Gesellschaft für Erdkunde.*

Manners and Customs of the Negroes in the Togo Country (First Lieutenant Herold)—A Voyage of Exploration in a Sailing Ship in East-Asiatic Waters—From a Letter Written by Prof. W. Sievers at Puerto Cabello to Baron Richthofen—On the recent Discovery of Gold in the Tierra del Fuego Archipelago (Dr. Hans Steffen, Santiago).

Zeitschrift.

The Passes of the Cordillera between the Argentine Republic and Chili, from 22° to 39° South Latitude (Prof. Dr. Ludwig Brackebusch)—The Mountain Forms in Southwestern Carinthia and their Origin (Dr. Fritz Frech)—The Place-Determinations of Columbus on his First Return Voyage, and his Leagues (Eugen Gelcich).

EDINBURGH.— *The Scottish Geographical Magazine.*

A Ride Through Persia. By Lieut. D. S. Buist, 2d Lancers, Hyderabad Contingent—The Physical Condition of the Waters of the English Channel. By H. N. Dickson, F.R.S.E. —The Distribution of Aquatic Plants and Animals. By H. B. Guppy, M.B., F.R.S.E. Deserts of Atacama and Tarapacá. By Mrs. Lily Grove—Some Notes on South Eastern Alaska and its People. By Prof. John J. Stevenson—Notes on the Construction of

Topographical Models. By J. G. Goodchild, H. M. Geological Survey—Exploration of the Rivers Tana and Juba. By Commander F. G. Dundas, R. N.—Madagascar. By Joël Le Savoureux, French Consul—The Climate of the Interior of Greenland. By Professor H. Mohn, of Christiania.

GOTHA.—*Petermanns Mitteilungen.*

Contributions to the Ethnography of Guatemala (Dr. K. Sapper, Coban)—Results of the Japanese Earthquake Statistics (Prof. Dr. A. Supan) —Geographical Distribution of Territory (Dr. Alexis V. Tillo)—Snow, Ice and Irrigation in the Western Part of North America (Prof. Dr. Fr. Ratzel)—British Acquisitions in the South Sea in 1892 (Dr. Ad. Vollmer)—A Journey to the Gold District of Eastern Nicaragua, performed in 1892 under instructions of the Nicaraguan Government by Dr. Br. Mierisch—The Law of Distribution of the Temperature of the Air over the Ocean (Dr. W. Zenker) —A Floating Island in the Atlantic Ocean (Dr. C. Ochsenius)—Droughts in China (W. Krebs and Prof. Dr. E. Brückner).

Ergänzungshefte 106, 107.

The Development of the Cartography of America to 1570 (Dr. Sophus Ruge) —The Population of the Earth (Herman Wagner and Alexander Supan).

LONDON.—*The Geographical Journal, including the Proceedings of the Royal Geographical Society.*

How Can the North Polar Region be Crossed?

By Dr. Fridtjof Nansen — Exploration and Character of Principal New Zealand Glaciers. By A. P. Harper, Hon. Sec. N. Z. Alpine Society—Lieut. Ryder's East Greenland Expedition, 1891–92 — Physiological Effects of High Altitudes. By Clinton Dent, F.R.C.S. Exploration of the Black Sea. By N. Andrusoff—Chitral—Treaty-Making in Africa. By Captain F. D. Lugard—The Fayum and Lake Moeris—To Lake Bangweolo and the Unexplored Region of British Central Africa. By Joseph Thomson—Journeys in the Benin Country, West Africa. By Capt. H. L. Gallwey, H. M. Vice-Consul to the Oil Rivers Protectorate—The Crossing of the Hispar Pass. By W. M. Conway—Mendez Pinto. By Stephen Wheeler—The Ruins in Mashonaland. By Henry Schlichter, Ph.D.—Ascent of Mount Demavend—Anglo-Portuguese Delimitation Commission—The Western Lowland of Ecuador. By Dr. Th.Wolf, late Government Geologist to the Republic of Ecuador—A Journey up the Baram River to Mt. Dulit and the Highlands of Borneo. By C. Hose, Resident of Baram District, Sarawak, Borneo — Expedition up the Jub River through Somali-Land, East Africa. By Commander F. G. Dundas, R. N.—Recent Explorations in the S. E. Congo Basin. By E. G. Ravenstein — Dr. Baumann between Victoria Nyanza and Tanganyika—The Permanence of Ocean Basins. By H. R. Mill, D.Sc., F.R.S.E.—The Reclamation of the Zuiderzee. By Prof. P. H. Schoute—Map of the World, 1542—A New Map of Switzerland — Floods in Queensland. By H. O. Forbes—Distribution and Movement of Population in India—The Regulation of the Iron Gates—The Industrial Development of Nyasaland. By J. Buchanan, C.M.G.—The Construction of a Map of the World on a Scale of 1:1000,000. By Prof. Dr. A. Penck.

PARIS.—*Société de Géographie, Comptes Rendus.*

Positions in Arabia determined from the Observations of Charles Huber, 1883–1884—Reconnoissance in the Tunisian Sahara—Letter from M. Dècle in Mashonaland—M. Gabriel Marcel on Some Little Known Documents relative to the Discovery of America—A Coast Canal in the United States—A Journey from Tiflis to India.—Tombs of Two Franciscan Missionaries of the 14th Century, discovered near Lin-Tsing Tshu, in China—The Transsahara Railway—Reception of M. Monteil—A Portrait of Columbus, ascribed to Sebastian del Piombo—Colonization among the Romans—The Algerian Sahara: Hassi-Inifel—M. de Brettes in Venezuela—Earthquakes in Java and Sumatra—Dr. Pichon's Travels in Anam—Siam.

ROME.—*Società Geografica Italiana, Bollettino.*

The Primitive Inhabitants of the Mediterranean (Prof. G. Sergi)—Expansion of the European

Race outside of Europe (E. Levasseur)—Missions in their Relation to Colonial Expansion (Marquis Volpe-Landi)—Legal and Moral Bonds between Emigrants and the Mother Country (Prof. A. Scalabrini)—Protection of Emigrants in Italy and in other Countries (Cav. E. Rossi)—Statistics of Migration within the Country (Prof. P. Sitta)—Pearl Fishery and Culture of the Pearl Oyster in the Dahlak Islands (Prof. A. Issel)—Foundation of Italian Colonial Banks (Cav. P. Corte)—Italian Emigration to America in its Relations to the National Economy (Count R. Magliano di Villar S. Marco)—On the Increase of Italian Commercial Exchanges with America (by the same)—An Institution to promote in Italy the Study of American Geography (by the same author)—On the Economical Relations to be established between Brazil, Uruguay and the Argentine Republic with Respect to Emigration (G. Careri)—Commercial and Other Relations to be established between Italy and Colombia (C. Vedovelli)—On the Criteria to be observed in the Classification of Mountain Systems in Geography (Prof. G. Marinelli)—On the Line of Division between the Alps and the Apennines, to be adopted in Instruction (by the same author)—On Geographical Instruction in Primary Schools (Prof. P. Porrena)—Prizes Awarded at the First Italian Geographical Congress—Botanical Excursion in the Habab Country (Dr. A.

Terracciano)--From Reyes to Villa Bella (Prof. L. Balzan)--Census of the Straits Settlements (Marquis F. de Goyzueta di Tovarena)—On Geographical Instruction in Secondary Schools and Propositions to improve it (Prof. C. Bertacchi)—On the Development of Geographical Studies in Normal Schools (Prof. E. Canevello)--On the Teaching of Geography in Universities with special Reference to professional Aims (Prof. G. Dalla Vedova)—Text-Books in Geography, and the Necessity of preventing the use of those which are unsuitable (Prof. G. Pennesi)—The Question of the Horary Gores at the Genoa Congress letter of (Prof. P. Tacchini)--An Unpublished Letter of Adriano Balbi—Preparatory Studies for the Fourth Decennial Census (Prof. G. Dalla Vedova).

VIENNA.—*Mittheilungen der Kais. Königl. Geographischen Gesellschaft.*

The Home of Aristotle, or the Peninsula of Chalcidice (Josef Adolf Brüch)—The Bubis of Fernando Po (Prof. Ferdinand Blumentritt) --The Deep-Sea Explorations of the *Pola* in 1890–1892—The Climate of Sofia (J. Hann).

WASHINGTON.— *The National Geographic Magazine.*

The North American Deserts (Prof. Dr. Johannes Walther, *Tr.*)—The Alaskan Boundary Survey (Dr. T. C. Mendenhall, J. E. McGrath, J. H. Turner and J. E. Turner)—Collinson's Arctic Journey (Gen. A. W. Greely).